

REMARKS

Reexamination and reconsideration of the application are requested.

The examiner's rejection of claims 1-4 and 18-22 as "anticipated", under 35 U.S.C. 102, is respectfully traversed. The examiner rejects these claims as being unpatentable over Hadjicostis (US 2004/0254570). Claims 2-4 depend from claim 1, and claims 19-22 depend from claim 18.

Claim 1 requires a controller 14 which rotationally controls the ultrasound medical treatment transducer 18 to emit ultrasound to thermally ablate patient tissue 20 for a plurality of predetermined time intervals each associated with the medical treatment transducer 18 rotationally disposed at a different one of an equal number of predetermined angular positions about the longitudinal axis 16, wherein a next-in-time time interval is associated with an angular position which is spatially non-adjacent to an angular position associated with a present-in-time time interval.

The phrase "with the medical treatment transducer 18 rotationally disposed at a different one of an equal number of predetermined angular positions" means that the transducer 18 is physically disposed at different angular positions. The word "disposed" in patent law is well known to mean physically positioned. Thus, claim 1 requires that the transducer 18 be physically rotationally positioned at different angular positions. Claim 1 cannot have the phrase "with the medical treatment transducer 18 rotationally disposed at a different one of an equal number of predetermined angular positions" be interpreted to mean that the transducer 18 can be rotationally stationary while ultrasound elements are selectively activated to rotate the ultrasound beam emitted by the transducer.

A first portion of claim 1 (the phrase "a controller which rotationally controls the medical treatment transducer to emit ultrasound to thermally ablate patient tissue"), considered alone, is open to the reasonable first and second interpretations of the examiner, wherein the first examiner interpretation includes physically rotating the transducer, and wherein the second examiner interpretation includes rotating the ultrasound beam without requiring transducer

physical rotation. However, a second portion of claim 1 (the phrase "with the medical treatment transducer rotationally disposed at a different one of an equal number of predetermined angular positions") can only be interpreted as requiring physically rotating the transducer. Since the second portion is linked to the first portion, the combination must be interpreted in a consistent manner which requires physically rotating the transducer.

The examiner's reference in Hadjicostis to figures 3-4 and 8-10 and to paragraphs 34, 36, 42, 43 and 46 are to embodiments (collectively called first embodiments) in Hadjicostis which do not have a controller which physically rotates the transducer as required by applicant's claim 1.

The examiner's reference in Hadjicostis to paragraphs 54 and 55 is to an embodiment which physically rotates the transducer. The examiner states that, "The motor and rotation rod embodiment can operate in the same fashion as that of the first described embodiment" citing paragraphs 54 and 55 of Hadjicostis. Paragraph 54 of Hadjicostis actually states, "The alternative system 320 operates in the same manner as system 20 except transducer device 390 has a single piezoelectric element 400 rather than multiple elements 102". The first described embodiments of paragraph 46, as stated in paragraph 46, include those which selectively activate subsets of elements including subsets of nonconsecutive elements (such that one or more elements are skipped or activated out of consecutive order). However, the second embodiment of Hadjicostis has only a single element and can do none of this. The transducer 390 of figure 11 of the second embodiment of Hadjicostis can physically rotate to sweep up to or less than 360 degrees, but Hadjicostis is silent on the details of this operation.

In paragraph [0005] of the "Background of The Invention" prior art section of applicant's specification, it is stated, "In another procedure, the ultrasound medical treatment transducer is stepwise rotated about the transducer's longitudinal axis to spatially-adjacent angular positions (such as 0 degrees, 20 degrees, 40 degrees, 60 degrees, 80 degrees, etc.) with ultrasound emitted for a lengthy predetermined time interval at each rotational position relative to a much shorter step time to move to a next rotational position". The second embodiment of Hadjicostis merely teaches a physically rotatable transducer but tells us no more. Therefore, the examiner has the

burden of finding prior art in a 102 rejection which explicitly teaches the transducer being operated in the manner specified in applicant's claim 1 (i.e., time-sequential, non-spatially-adjacent rotational steps) and not prior art which is silent on how the transducer is operated when applicant, in the prior art section of his specification, has disclosed the prior art operation of the transducer (i.e., time-sequential, spatially-adjacent rotational steps). It is not enough for the examiner to say in a 102 rejection that a controller could be programmed to operate the single physically rotatable transducer of Hadjicostis as specified in applicant's claim 1 (and claims 2-4).

Claim 18 requires a controller which substantially-continuously rotates the transducer during treatment. The physically rotatable transducer of Hadjicostis is silent on the specifics of the transducer rotation during treatment. From the Background of the Invention section of applicants' specification, applicants argue that Hadjicostis is step-wise rotating the transducer to specific treatment angles. As with claim 1, it is not enough for the examiner to say in a 102 rejection that a controller could be programmed to operate the single physically rotatable transducer of Hadjicostis as specified in applicant's claim 18 (and claims 19-22).

Applicants note that they can not find the phrase "as well as other sequences" the examiner has put in quotes in reference to paragraph 46 of Hadjicostis on page 4 of the Office Action.

Inasmuch as each of the rejections has been answered by the above remarks, it is respectfully requested that the rejections be withdrawn, and that this application be passed to issue. The Commissioner is authorized to charge any additional fees required or to credit any overpayment to Deposit Account No. 20-0809.

Respectfully submitted,

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